UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,042	08/30/2000	Timothy James Blenke	29579/KC15929	2360

23482 7590 07/08/2002

WILHELM LAW SERVICE, S.C.
100 W LAWRENCE ST
THIRD FLOOR
APPLETON, WI 54911

EXAMINER	
COLE, ELIZABETH M	

ART UNIT	PAPER NUMBER
1771	4

DATE MAILED: 07/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

A-S-4

Office Action Summary	Application No.	Applicant(s)	
	09/651,042	BLENKE ET AL.	
	Examiner	Art Unit	
	Elizabeth M Cole	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-77 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-77 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Claims 1-77 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-76 of copending Application No. 09/651,041. Although the conflicting claims are not identical, they are not patentably distinct from each other because each discloses a bonded composite comprising two elements and the claimed bond pattern.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the bond element contact lengths must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. Claims 1-77 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not teach how to make/use the claimed invention because it does not disclose the structure of the stress receptor, transfer, dissipation and termination elements, does not define the amount, direction or type of stress which is applied to the composite material, and therefore does not disclose how to make/use the claimed invention. The

specification states what the elements do but it does not teach what the elements do in response to a specific stress and it does not teach the structure of the elements or of the bonded material.

4. Claims 1-76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In claim 1, it is not clear what is meant by a "as a first thin-section element, a first layer of thin-section sheet material". What is the structure of this material? Does this refer to a sheet which has portions which are thinner than other portions? Does it refer to a sheet which is uniformly thin? Additionally, the term "thin" in claim 1 is a relative term which renders the claim indefinite. The term "thin" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear what thickness the first layer of sheet material would have to have in order to be considered thin. Also in claim 1, it is not clear what is meant by "a second thin-section element". Is the second thin-section element also a sheet?

Also, the overall structure being claimed is not clear. How do the stress receptor elements, the transfer and dissipation elements differ structurally from each other? Is it where they are located within the bond pattern or do they differ in a structural way, such as size, depth, etc.? It is not clear whether the stress receptor, transfer and dissipation elements which seem to be the individual embossments or indentations differ from each other structurally, (size, depth, etc.), or only in where they are positioned in the pattern. The elements are being claimed in

terms of how they interact with stresses, however, the claim does not recite what the stresses are, i.e., from what direction, what force., etc. Are they the stresses formed during the bonding process, are they stresses which occur during use and if so, are they all stresses which occur during use or just certain stresses or from certain directions. In other words, does the bond pattern respond to any stress from any direction or does it respond to stress from a certain direction, i.e., from above, or below, or stress which presses the two layers together, or stress which pushes on the layers from the edges in a direction perpendicular to the face of the layers which comprise the bond pattern. It is not clear how the stress termination elements differ from stress receptor, transfer and dissipation elements? Do they differ structurally from each other or is the difference where they are located within the bond pattern? This problem is also present in other claims. Claims merely setting forth physical characteristics desired in an article, and not setting forth specific compositions which would meet such characteristics, are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future and which would impart the desired characteristics. Thus, the instant limitations are too broad and indefinite since it purports to cover everything which will perform the desired functions regardless of its composition, and, in effect, recites compounds by what it is desired that they do rather than what they are; the expressions also are too broad since it appears to read upon materials that could not possibly be used to accomplish purposes intended. *Ex parte Slob* (PO BdApp) 157 USPQ 172.

6. Additional specific 112 2nd problems include:

Claim 1, lines 5-8 of claim text, recites "the side edges of the bond pattern being defined generally by those areas of the respective thin-section elements which participate in absorbing and dissipating by operation of the bond pattern, stresses received into the bond pattern,". This limitation renders the claim indefinite because it is not clear what section of the bond pattern absorbs and dissipates stresses received into the bond pattern. The claim goes on to recite that the bond pattern comprises stress receptor elements and transfer and dissipation elements. Thus, it is not clear whether the stress receptor elements or the transfer and dissipation elements are being referred to or both. It does not appear that both stress receptor elements and transfer and dissipation elements can be being referred to as "areas of the respective thin-section elements which participate in absorbing and dissipating", since the claim goes on to recite that the transfer and dissipation elements are disposed inwardly of the side edges and inwardly of the stress receptor elements. It is not clear how the transfer and dissipation elements can define the side edges of the bond pattern when they are recited as being disposed inwardly of the side edges and inwardly of the stress receptor elements, but at the same time, it is not clear how the stress receptor elements could be "those areas of the respective thin-section elements which participate in absorbing and dissipating by operation of the bond pattern, stresses received into the bond pattern," since the stress receptor elements are not recited as absorbing and dissipating stresses. Therefore, the claimed structure of side edges of the bond pattern is not clear.

Claim 1, lines 9-12 recites "the bond pattern reflecting application of force urging the first and second thin-section elements toward each other in face-to-face relation ship to form an array

of separate, distinct, and spaced elongate bond elements in a repeating arrangement affixing said first and second thin-section elements to each other," which renders the claim indefinite because it is not clear whether the "force" being "reflected" is the same as the "stresses" to which the bond pattern is subjected, or if it is the force used to form the bond pattern.

Claim 1, line 15 of text, recites that the stress receptor elements are disposed "proximate the side edges of the bond pattern". However, as set forth above, the boundaries of the side edges of the bond pattern is not clearly defined, and therefore, the recitation that the stress receptor elements are disposed proximate the side edges of the bond pattern is likewise indefinite. Similarly, in line 19 of text, the position of the transfer and dissipation elements is defined in terms of its position relative to the side edges of the bond pattern and therefore the position of the transfer and dissipation elements is indefinite.

Claim 2, line 2 of text, line 5 of text and line 6 of text, recites "the interior portion of the bond pattern". There is insufficient antecedent basis for this limitation. Additionally, it is not clear what portion of the bond pattern is considered the interior portion. Also, claim 2, line 3 refers to the side edges of the bond pattern. As set forth above, the boundaries of the side edges of the bond pattern is not clearly defined and therefore the recitation regarding the position of the second end of the transfer and dissipating elements relative to the side edge is also indefinite.

Claims 3 and 4 lines 1-2 of text, recite "wherein bonds corresponding to said bond elements are activated". This limitation renders the claims vague and indefinite because it is not clear whether this means that the bond elements are present in a latent, (i.e., non-activated), form

and are then activated or if this means that bonds are formed by the application of thermal energy or ultrasonic-frequency energy to the first and second thin-section elements so that bonds are formed in a pattern wherein the bonds comprise stress receptor elements and transfer and dissipation elements.

Claim 5, lines 3-5 of text recites "the group consisting of polyolefins including polyethylenes and polypropylenes, polyester and polyamides, and copolymers, mixtures and blends of such polymeric materials". This recitation renders the claim vague and indefinite because it is not clear whether the claim is limited to polyethylenes and polypropylenes or if these are exemplary and the claim encompasses other polyolefins. Also, it is not clear what is meant by "such polymeric materials", i.e, is the claim limited to the particular polymers recited or does the claim encompass other similar polymers, and if so, what polymers in particular would be encompassed?

Claim 6, recites "the interior portion of the web" in line 4 of text. There is insufficient antecedent basis for this limitation.

Claim 7, lines 4-8 recites "a second thin-section element bonded to the first thin-section element by bond elements defining a bond pattern, the bond pattern having regularly repeating bond segments, each repeating bond segment comprising a defined set of bond elements spaced according to a generally fixed segment pattern,". It is not clear what is meant by a defined set of bond elements, i.e., how was the set of bond elements defined and what elements make up the set of bond elements. Also, it is not clear what is meant by a generally fixed segment pattern. By

generally fixed, does this mean that the pattern varies in some way and if so, in what way does the pattern vary? Also, it is not clear what is meant by a segment pattern. A segment is defined as "any of the parts into which something can be divided". What pattern do the segments make up?

Claim 7, defines the bond pattern at lines 9-13 of text. See the rejection of claim 1 regarding how the side edges boundaries of the bond pattern is defined because the same problem is present in claim 7.

Claim 7 recites at lines 14-15 of text, that the bond pattern reflects the application of force urging the first and second thin-section elements toward each other. See the rejection of claim 1 above regarding this limitations as the same problem is present in claim 7.

Claim 7 recites "ones of said transfer and dissipation elements extending across the width of said pattern, from loci proximate the side edges, at angles of between about 10 degrees and about 65 degrees with respect to the longitudinal axis". As set forth with regard to claim 1, the boundaries of the side edges are not clearly defined.

Claim 7 recites "a bond width". Claim 7 also recites a "pattern width". The pattern width is represented by first and second side edges of the bond pattern. The bond width is defined as the width of the pattern perpendicular to the longitudinal axis, including spaces between bond elements, at any point along the length of the pattern, such bond width extending along the pattern width. It is not clear how the bond width differs from the pattern width. If the bond width is coextensive with the pattern width, how they are different? If they are the same, why are different terms being used to refer to the same element within a claim? Claim 7 recites in lines

24-25, "bond element contact lengths being correspondingly defined along the bond width". It is not clear what is meant by "bond element contact lengths". The drawings do not show this element. The specification at page 10 states "Bond element contact lengths at respective bond elements are correspondingly defined along the bond width." It is not clear what is meant by bond element contact lengths. Does this refer to the length of an individual bond element? This is not clear from the discussion in the specification or from the claim. Claim 7 further defines the composite contact length as the composite of the bond element contact lengths. However, since the meaning of the limitation "bond element contact length" is not clear, the definition of the composite contact length is also not clear. Therefore, claim 7 is indefinite.

Claims 8 and 9 also refer to the composite contact length, however, as set forth above, this limitation is indefinite.

With regard to claim 10, see the rejection of claim 1 regarding the indefiniteness of "the side edges of the bond pattern".

With regard to claims 14-15 see the rejection of claims 3-4 above.

With regard to claim 16, see the rejection of claim 5 above.

With regard to claim 17, see the rejection of claim 6 above.

Claim 19 recites, "wherein increases and decreases in power distribution across the width of the bond pattern define variations in composite contact lengths". It is not clear what is meant by power distribution, is power being used in the same way that stresses and force are used in preceding claims? If so, why is the same concept being expressed using different terms, (i.e.,

force, stress, power). How is "power" being distributed across the bond pattern? Power can be defined as "strength or force exerted or capable of being exerted" or as "the rate at which work is performed, mathematically expressed as the first derivative of work with respect to time and commonly measured in units such as the watt and horsepower."(Webster's II New Riverside University Dictionary). Also, as set forth above, the composite contact length is indefinite because the bond element contact length is not clearly defined in the specification or claims. Also, claim 19 compares the variation in composite contact lengths as compared to "the average composite contact length for a given bond pattern for at least a complete circumferential rotation of a rotary anvil". It is not clear what is being claimed, is the bond pattern which results where power distribution varies being compared to another, undefined bond pattern, (although the claim recites "given", no bond pattern is set forth, therefore, the recitation of a "given pattern" is indefinite")? Also, it is not clear what is meant by "for at least a complete circumferential rotation of a rotary anvil".

In claim 20, the comments regarding the boundaries of the bond side edges, the application of force and the position of the bond elements relative to the side edges, set forth regarding claim 1 are also applicable to claim 20.

In claim 24-25, see the rejection of claims 3-4.

For claim 26, see the rejection of claim 5.

For claims 27 and 28, see the rejection of claim 6.

With regard to claim 29, as set forth above, the boundaries of the side edges are not clear.

With regard to claim 30, see the rejection of claim 1 above. With regard to claims 31-32, see the rejection of claims 3-4 above.

With regard to claim 33, see the rejection of claim 5 above.

With regard to claim 34, see the rejection of claim 6.

With regard to claim 35, see the rejection of claim 1 and claim 19.

With regard to claim 36, see the rejection of claim 1.

With regard to claim 41, see the rejection of claim 1 and claim 7.

With regard to claim 44, see the rejection of claim 1.

With regard to claims 48-49 see the rejections of claims 3-4.

With regard to claim 50, see the rejection of claim 6.

With regard to claim 51, see the rejection of claim 5.

With regard to claim 62, see the rejection of claim 19.

With regard to claim 63, see the rejection of claim 1. Also, there is no antecedent basis for "the interior portion" of the bond pattern and it is not clear how much of the bond pattern or what area of the bond pattern would correspond to the interior portion.

With regard to claims 67-68, see the rejection of claims 3-4.

With regard to claim 69, see claim 5.

With regard to claim 70, see the rejection of claim 6.

With regard to claim 71, it is not clear what is meant by the interior of the bond pattern. There is no antecedent basis for this limitation. What are the boundaries of the interior of the bond pattern?

With regard to claim 73, see the rejection of claim 63.

With regard to claims 74-75, see the rejections of claims 3-4.

With regard to claim 76, see the rejection of claim 5.

With regard to claim 77, see the rejection of claim 6.

7. For purposes of the art rejection below, if a bond pattern has the claim pattern, the elements which make up the pattern will be presumed to function as stress receptor elements, transfer and dissipation elements, by virtue of their location within the pattern and relative to each other, since the claims as currently presented do not differentiate between the elements in terms of structure.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-6, 30-34, 73-77 are rejected under 35 U.S.C. 102(b) as being anticipated by McCormack et al, WO 99/14415. McCormack et al discloses a bonded composite material which comprises a film layer and a nonwoven layer. The bonded composite material may be employed in absorbent articles such as diapers, etc. The bonded composite material comprises two layers

which are bonded together by means of a bond pattern. The bond pattern necessarily comprises a bond length, a bond width and it also comprises a central longitudinal axis. The bond pattern further comprises a plurality of bond elements. The bond elements which are at the perimeter of the bond pattern correspond to the claimed stress receptor elements. The bond elements which are disposed within the perimeter of the bond pattern correspond to the claimed transfer and dissipation elements. The transfer and dissipation elements are closer to the stress receptor elements than the stress receptor elements are to each other. See figures. The bonds may be formed by the application of thermal energy. The layers may comprise polymeric materials such as polyolefins. See example 1.

10. Claims which recite bond contact element length have not been included in the art rejection since the structure is so unclear an art rejection can not be made.

11. Claims which recite that the transfer and dissipation elements have legs extending from the respective ends towards each other have not been included in the art rejection because none of the cited art teaches or suggests the claimed structure of the transfer and dissipation elements.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McFarren, U.S. Patent No 3,575,764; Drelich, U.S. Patent No. 3,087,833; Boyd et al, U.S. Patent No. 4,275,105.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c

July 1, 2002